(12)

#### **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3: 27.08.1997 Bulletin 1997/35

79.15

(51) Int CI.6: A61M 1/36

- (43) Date of publication A2: 07.05.1997 Bulletin 1997/19
- (21) Application number: 96307822.5
- (22) Date of filing: 29.10.1996
- (84) Designated Contracting States: DE FR GB IT
- (30) Priority: 31.10.1995 US 551150
- (71) Applicant: HAEMONETICS CORPORATION
  Braintree Massachusetts 02184 (US)
- (72) Inventors:
  - Stacey, Gary
     Marshfield, Massachusetts 02050 (US)

- York, Frederick
   Arlington, Massachusetts 02174 (US)
- Lamborghini, David
   Mansfield, Massachusetts 02048 (US)
- Liberatore, Steven
  Taunton, Massachusetts 02780 (US)
- (74) Representative: Waldren, Robin Michael MARKS & CLERK, 57-60 Lincoln's Inn Fields London WC2A 3LS (GB)
- (54) Blood-processing machine
- (57) A multiprotocol blood-processing machine and disposable units for use therewith. The disposable units generally comprise a centrifuge bowl for separating whole blood into blood constituents, an inlet tube for conveying blood into the bowl, an outlet tube for conveying the blood constituents away from the bowl, and a manifold for placing the inlet tube and the outlet tube in fluid communication with a tube from a donor. The manifold has a machine-readable bar-code label for identifying to the blood processing machine which type

of disposable unit is being coupled to it. The machine itself comprises a central processing unit that controls overall operation, a first computer memory containing safety-monitoring instructions that cause the central processing unit to monitor various state parameters in order to ensure donor safety, and a second computer memory containing instructions that define at least one apheresis or blood-processing protocol. In some implementations, the second computer memory is removable from and insertable into the blood processing machine by an operator.







#### **EUROPEAN SEARCH REPORT**

Application Number

of relevant pa	ndication, where appropriate,	Relevant	CLASSIFICATION OF THE
UN 90 03376 A /F 11		to chaim	APPLICATION (Int.CL6)
WO 80 02376 A (E LI	CHTENSTEIN)	3-5,15, 17-19	A61M1/36
* page 33, line 25 * page 44, line 7 - * page 52, line 26 * page 52, line 6 - * page 52, line 26	line 29 * * line 19 * - page 53, line 6 *		
* column 1, line 1 * column 3, line 57 * column 4, line 27	- line 5 * - column 4, line 10 * - line 54 *	6-8	
		6-8	TECHNICAL FIELDS SEARCHED (Int.CL4)
* page 12, line 19		1,3,6,7 10-13	A61M
US 4 610 781 A (A B	ILSTAD) - line 29 *		
* page 1, line i -	line 15 *		
	-/		
The present search report has t	wen draws up for all claims	1	
Place of search	Date of completion of the search		Econoace
THE HAGUE	17 June 1997	Ve	ereecke, A
rticularly relevant if taken alone rticularly relevant if combined with an cument of the same category choological background	E : earlier paient di after the filing other D : document cited L : document cited	ocument, but pe date in the applicat for other reaso	ion ns
	* page 33, line 25 * page 44, line 7 - * page 52, line 26 * page 55, line 20 * figures *  EP 0 384 155 A (B.B. * column 1, line 1 * column 3, line 57 * column 4, line 27 * column 5, line 10 * figure 1 *  EP 0 623 357 A (ALT * page 9, line 48 - * figure 7 *  W0 94 10921 A (EP T * page 12, line 19 * figures 4,5 *  US 4 610 781 A (A B * column 7, line 9 * figure 2 *  FR 2 513 884 A (ELM * page 1, line 1 - * page 11, line 11  The present search report has be Place of tearch THE HAGUE  CATEGORY OF CITED DOCUME	* page 33, line 25 - line 37 *     * page 44, line 7 - line 29 *     * page 52, line 26 *     * page 52, line 6 - line 19 *     * page 52, line 6 - line 19 *     * page 52, line 26 - page 53, line 6 *     * page 55, line 20 - page 56, line 7 *     * figures *  EP 0 384 155 A (B.BRAUN MELSUNGEN AG)     * column 1, line 1 - line 5 *     * column 3, line 57 - column 4, line 10 *     * column 4, line 27 - line 54 *     * column 5, line 10 - column 6, line 26 *     * figure 1 *  EP 0 623 357 A (ALTHIN CD MEDICAL, INC.)     * page 9, line 48 - page 10, line 51 *     * figure 7 *  W0 94 10921 A (EP TECHNOLOGIES INC.)      * page 12, line 19 - page 16, line 27 *     * figures 4,5 *  US 4 610 781 A (A BILSTAD)     * column 7, line 9 - line 29 *     * figure 2 *  FR 2 513 884 A (ELMAR MED. SYSTEMS LTD)     * page 1, line 1 - line 15 *     * page 11, line 11 - line 20 *  The present search report has been drawn up for all chaims  Place of Learch  THE HAGUE  The present search report has been drawn up for all chaims  Place of Learch  THE HAGUE  CATEGORY OF CITED DOCUMENTS  Aricularly relevant if taken alone  pricularly relevant if taken alo	* page 33, line 25 - line 37 *     * page 44, line 7 - line 29 *     * page 52, line 26 *     * page 52, line 26 - page 53, line 6 *     * page 52, line 20 - page 56, line 7 *     * figures *  EP 0 384 155 A (B.BRAUN MELSUNGEN AG)     * column 1, line 1 - line 5 *     * column 3, line 57 - column 4, line 10 *     * column 4, line 27 - line 54 *     * column 5, line 10 - column 6, line 26 *     * figure 1 *  EP 0 623 357 A (ALTHIN CD MEDICAL, INC.)     * page 9, line 48 - page 10, line 51 *     * figure 7 *  WO 94 10921 A (EP TECHNOLOGIES INC.)      * page 12, line 19 - page 16, line 27 *     * figures 4,5 *  US 4 610 781 A (A BILSTAD)     * column 7, line 9 - line 29 *     * figure 2 *  FR 2 513 884 A (ELMAR MED. SYSTEMS LTD)     * page 1, line 1 - line 15 *     * page 11, line 11 - line 20 *  The present search report has been drawa up for all chaims  Place of Learch  THE HAGUE  CATECORY OF CITED DOCUMENTS  CATECORY OF CITED DOCU

2



European Patent

Office

CI	AIMS INCURRING FEES					
	·					
The prese	The present European patent application comprised at the time of filing more than ten claims.					
	All claims tees have been paid within the prescribed time limit. The present European search report has been drawn up for all claims.					
	Only part of the claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims and for those claims for which claims fees have been paid,					
	namely claims:					
	No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims.					
LA	CK OF UNITY OF INVENTION					
The Searc	h Division considers that the present European patent application does not comply with the requirement of unity of					
invention a namely:	and relates to several inventions or groups of inventions,					
	see sheet -B-					
,						
<b>M</b>	All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.					
_	Colvered of the Author secret fees have been paid within the fixed time limit. The					
	Only part of the further search lees have been paid within the tixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respects of which search lees have been paid,					
	namely claims:					
	None of the further search fees has been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims,					
	namely claims.					



#### **EUROPEAN SEARCH REPORT**

Application Number EP 96 30 7822

ategory	Citation of document with in of relevant pass US 5 460 490 A (R C/* column 6, line 52 * column 10, line 2 * column 10, line 64 *	ARR) - column 7, 1 7 - line 43 *	ine 7 *	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IBL.CL.6)
	* column 6, line 52 * column 10, line 23 * column 10, line 64 *	- column 7, 1 7 - line 43 * 4 - column 11,	ine 7 * line 20		
	* column 10, line 64	4 - column 11,	ine 7 *		
	* column 10, line 64	4 - column 11,	line 20		
	•	•	11ne 20		
•					•
1					1
-			İ		ĺ
					TECHNICAL FIELDS
					SEARCHED (Int.Cl.6)
- 1			i		
		•			
ļ					1
					1
	The present search report has be	een draws up for all clai	ins		1
	Place of search	Date of completi	i	<u> </u>	Expelest
	THE HAGUE	17 June		Ver	reecke, A
	CATEGORY OF CITED DOCUMEN	NTS T	theory or principle carlier patent doc	e underlying the	a invention
X:par	icularly relevant if taken aione		: earlier patent doc after the filler da	umant, but pub	lished on, or
Y : par	icularly relevant if combined with ano	ther D	after the filing da : socument cited for : socument cited for	the application	n
A : teci	nological background		: member of the sa	**********	



EP 96 30 7822 - B -

#### LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirement of unity of invention and relates to several inventions, or groups of inventions, namely:

1. Claims 1-5,15-19

A disposable having an indication readable by a blood

processing machine and methods therefor.

2. Claims 6-14

A blood processing machine with two computer memories

which are computationally distinct from each other.

EPO Form Supplementary Sheet B (1996)

# This Page is Inserted by IFW Indexing and Scanning Operations and is not part of the Official Record

### **BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:
☐ BLACK BORDERS
☐ IMAGE CUT OFF AT TOP, BOTTOM OR SIDES
☐ FADED TEXT OR DRAWING
BLURRED OR ILLEGIBLE TEXT OR DRAWING
SKEWED/SLANTED IMAGES
COLOR OR BLACK AND WHITE PHOTOGRAPHS
GRAY SCALE DOCUMENTS
☐ LINES OR MARKS ON ORIGINAL DOCUMENT
☐ REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY
□ отнер.

## IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.